Cotton/Soybean Insect Newsletter

Volume 12, Issue #9 Edisto Research and Education Center in Blackville, SC 29 June 2017

Pest Patrol Alerts

The information contained herein each week is available via text alerts that direct users to online recordings. I will update the short message weekly for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter "y" to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter

When noteworthy events happen the in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at @bugdocisin on Twitter.

Training Opportunity

We will offer an in-field scouting school on 19 July and spend a couple of hours in cotton and soybean fields demonstrating techniques for estimating populations of insects, discussing management options for important insects, and answering questions. Jonathan Croft, Charles Davis, and Jeremy Greene will conduct this scouting school. This hands-on, in-field training will begin at 9 AM at the Cameron Cotton and Seed Company location (301 Boyce Lawton Drive, Cameron, SC 29030) and conclude at 12 PM with lunch and final discussion. Recertification credits for pesticide licenses and CCA will be available. Please contact Jonathan at 803-534-6280 or croft@clemson.edu by 17 July if you plan to attend. We need a good estimate for attendance for the meal and handouts. Additional training opportunities in the works.

News from Around the State

Collins Gardner, consultant in the upper Coastal Plain of SC, reported that he is spraying sugarcane aphids in grain sorghum. **Fleming McMaster**, consultant in the lower portion of the Coastal Plain of SC, reported finding kudzu bugs in almost every soybean field he has checked. **Margo Breish**, sales rep with Bayer CropScience, reported seeing some heavy aphid numbers in spots of cotton fields and that the population of beneficial arthropods was growing rapidly. This is good for the coming weeks. The fields did not need to be treated for aphids. Reports of the aphid fungus are being made. Another observation from **Will Henderson**, rep with Monsanto, indicated that he thought aphids were worse in cotton following corn the previous year, compared with cotton following peanuts. **Andrew Warner**, county agent in Hampton, reported that he observed many more CEW larvae in corn this year compared with last year, and this will be important for cotton and soybeans later. Andrew also took this photo of a Japanese beetle (defoliator) in soybeans.

The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture, South Carolina Counties, Extension Service, Clemson, South Carolina.

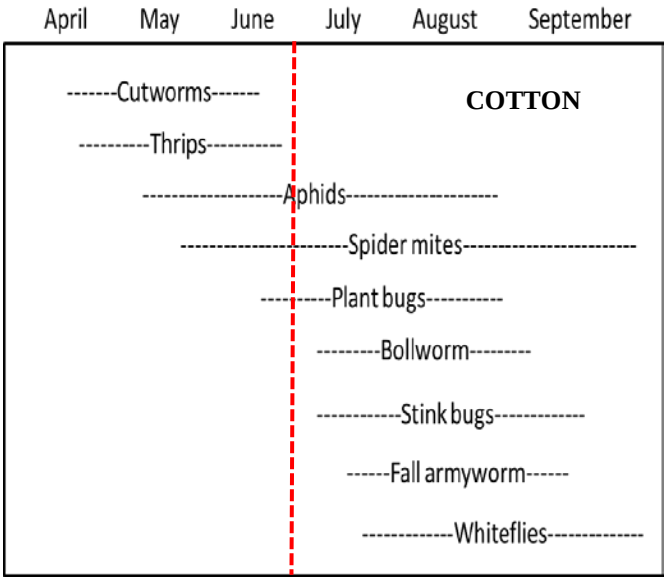
Public Service Activities

The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.

Cotton Situation

As of 25 June 2017, the USDA NASS South Carolina Statistical Office estimated that about 98% of the crop has been planted, compared with 97% the previous week, 99% at this time last year, and 99% for the 5-year average. About 32% of the crop is squaring, compared with 23% the previous week, 20% at this time last year, and 25% for the 5-year average. About 1% of the crop is setting bolls, compared with NA% the previous week, 0% at this time last year, and 2% for the 5-year average. The condition of the crop was described as 40% excellent, 48% good, 12% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.

Cotton Insects



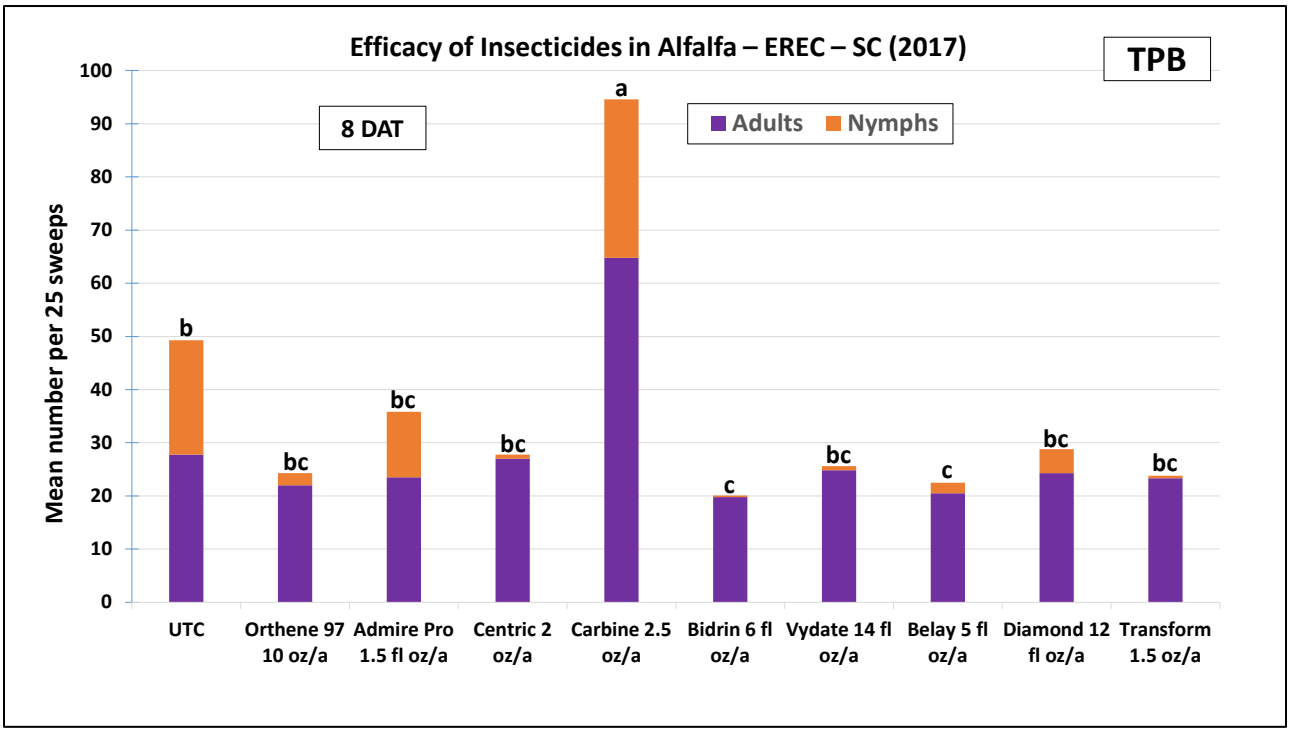
Check for aphids, plant bugs, and spider mites this week. As cotton moves into blooming and setting bolls, we will add bollworm and stink bugs to the list, but much of our cotton is before bloom at this point.

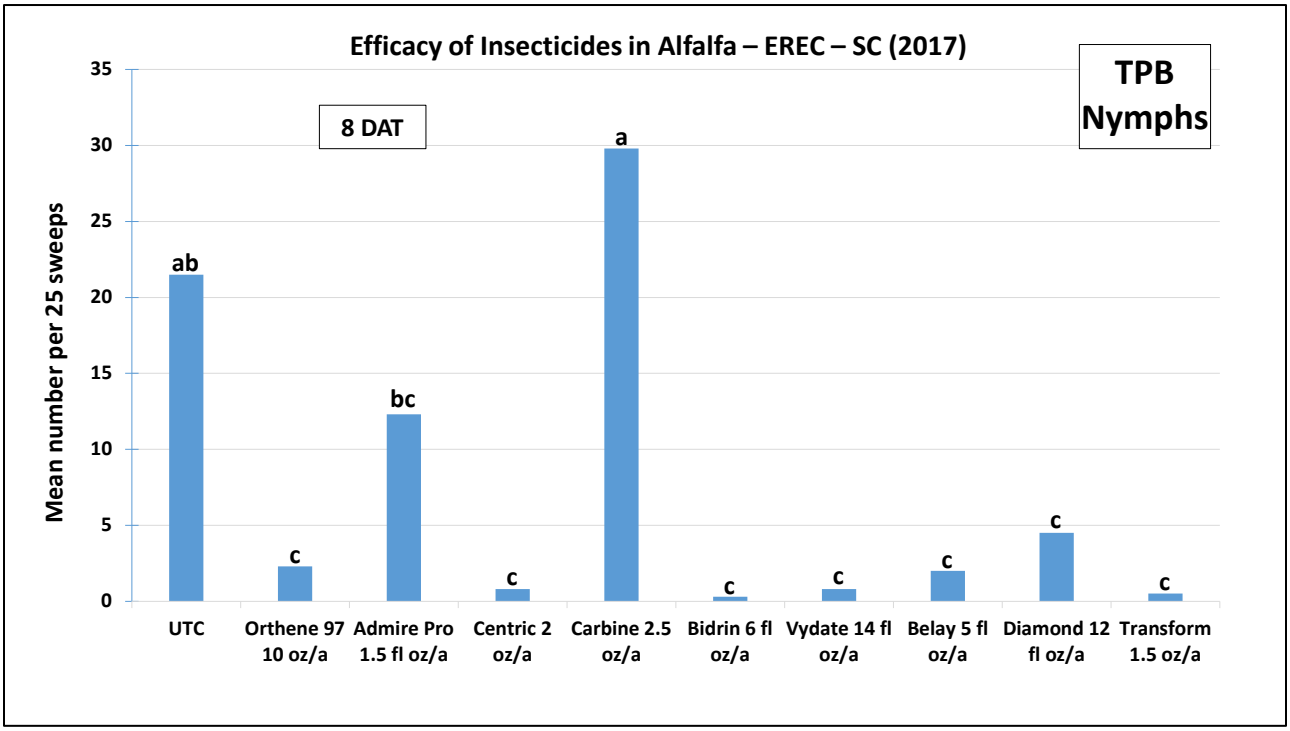
Some consultants in the state are not seeing issues with plant bugs, but some are, so you have to have your fields scouted in order to know. As long as square retention is staying above 80%, and you don't see many plant bugs, keep checking, as you don't have an issue yet. Most of our acres will not have problems with plant bugs…find the acres that do. We recommend the threshold they use in the Mid-South of 8 TPB per 100 sweeps (so about 2 or so per 20-25 sweeps would be close to threshold) or about 3 TPB per 6 rowft using a drop cloth. Checking cotton before bloom with a sweep net is what should be done right now. As reported last week, I put out a trial in alfalfa to check the efficacy of our recommended products for plant bugs, and results from the second evaluation are on the next page. Again, keep in mind that alfalfa has a very different canopy structure than cotton, with fewer places for TPB to hide. In cotton, they can get into square bracts and avoid the direct spray, meaning that residual control is important, as they move around. These results might not directly relate to what would happen in cotton, but I think they are a good indication of general efficacy. Again, numbers of TPB were reduced in all treatments at 8 days after treatment, except for Carbine, a material that is also slow acting and likely not the best option for TPB in terms of efficacy. This is further illustrated with the numbers of nymphs, as there were more in the Carbine treatment than in the untreated control. I was surprised to see the high numbers in the imidacloprid treatment, as it is often a standard for control of TPB. The other materials looked good, but you would only want to use a neonicotinoid (Centric, Belay, Admire Pro) before bloom, as the pyrethroids, OPs (Bidrin Orthene), or carbamates (Vydate) used in the pre-bloom window would decimate the building population of natural enemies and likely lead to problems with bollworm later.

The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture, South Carolina Counties, Extension Service, Clemson, South Carolina.

Public Service Activities

The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.





The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture, South Carolina Counties, Extension Service, Clemson, South Carolina.

Public Service Activities

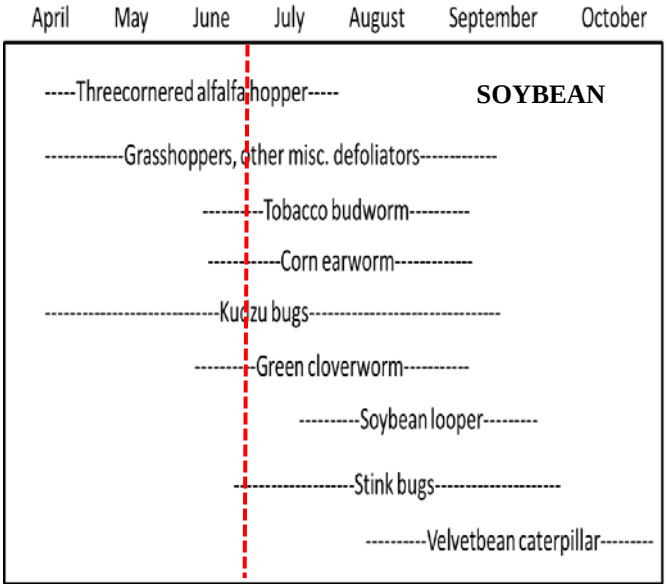
The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.

Soybean Situation

As of 25 June 2017, the USDA NASS South Carolina Statistical Office estimated that about 90% of our soybean crop has been planted, compared with 81% the previous week, 91% at this time last year, and 89% for the 5-year average. About 80% of the crop has emerged, compared with 65% the previous week, 84% at this time last year, and 75% for the 5-year average. About 5% of the crop is blooming, compared with 2% the previous week, 1% at this time last year, and 2% for the 5-year average. The condition of the crop was described as 8% excellent, 81% good, 11% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.

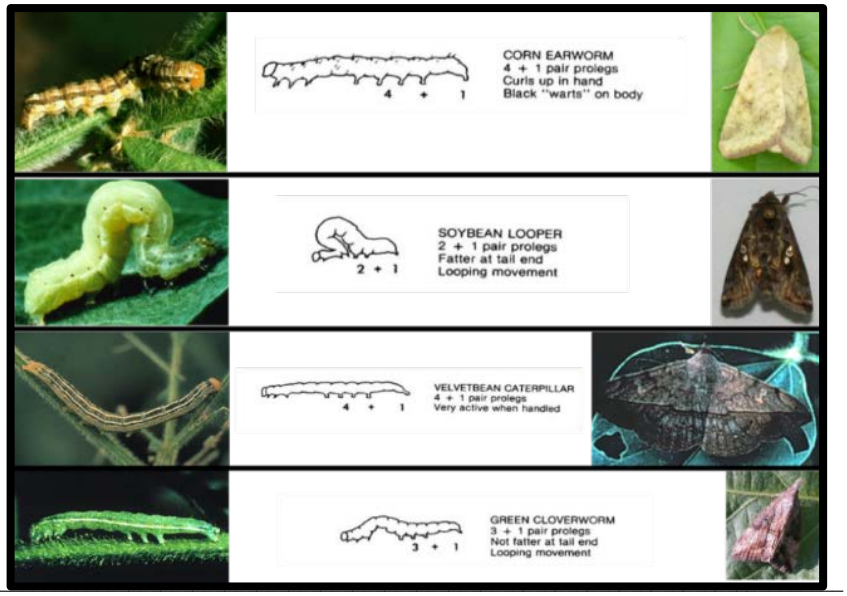
Soybean Insects

As mentioned in previous weeks, insect activity is limited generally, but we need to check for the stem-feeding insects, such as kudzu bugs and threecornered alfalfa hoppers (TCAH) now before bloom. Kudzu bugs are present in most fields I have examined, as are TCAH. Only consider treating for kudzu bugs if reproducing populations reach 1 nymph per sweep. Treat for TCAH if numbers reach several per rowft or sweep and feeding (girdling of stems) is observed. Pyrethroid insecticides typically do a fine job in controlling TCAH and kudzu bugs. Pay attention to the moths taking short flights from row to row while you are walking fields. Here is a guide to identifying those moths depositing eggs that turn into the pest caterpillars also shown here.



Tobacco budworm moth. Caterpillars look identical to corn earworm larvae.

Numbers of TBW moths caught in pheromone traps this past week were higher than the CEW numbers, so be aware of TBW now. This species can be a problem in soybeans and require a more expensive insecticide than pyrethroids, which are ineffective on TBW.



The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture, South Carolina Counties, Extension Service, Clemson, South Carolina.

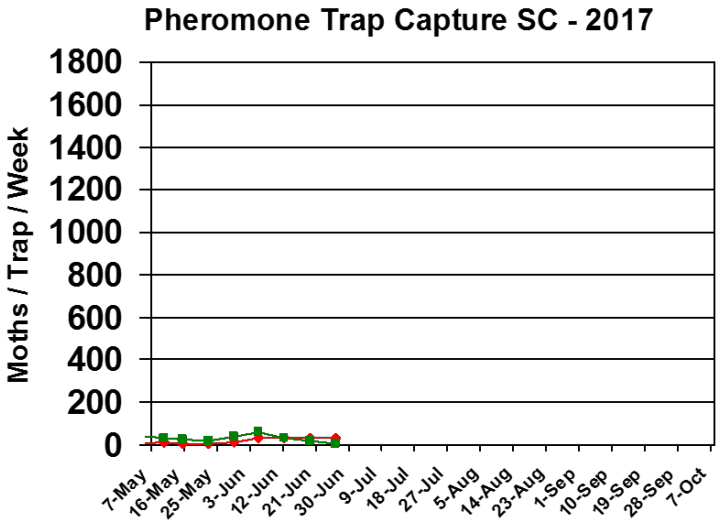
Public Service Activities

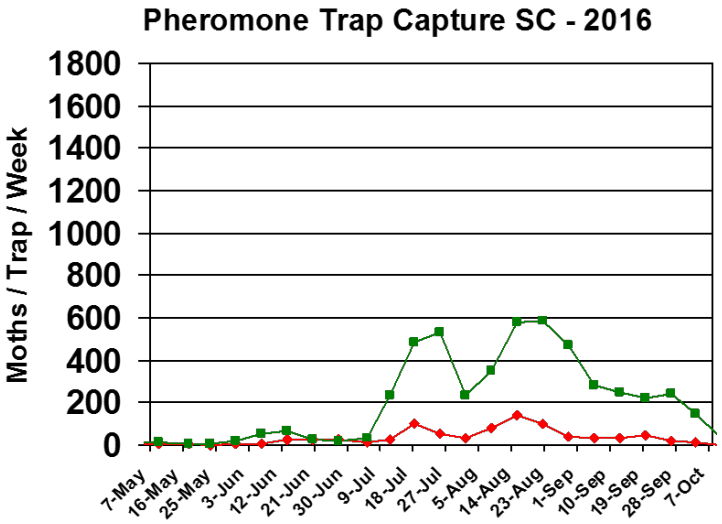
The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.

CLEMSON UNIVERSITY

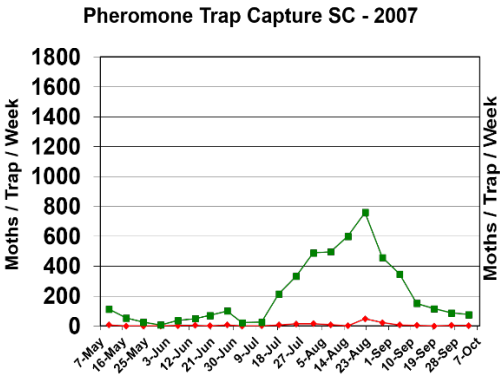
Bollworm & Tobacco Budworm

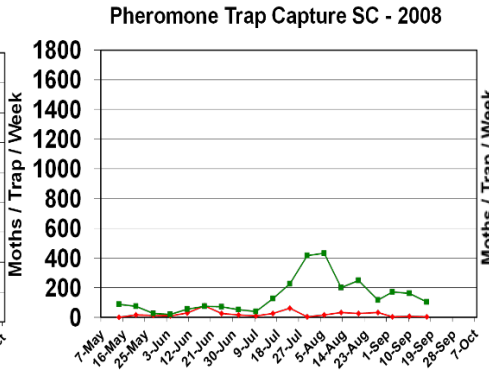
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2016 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.

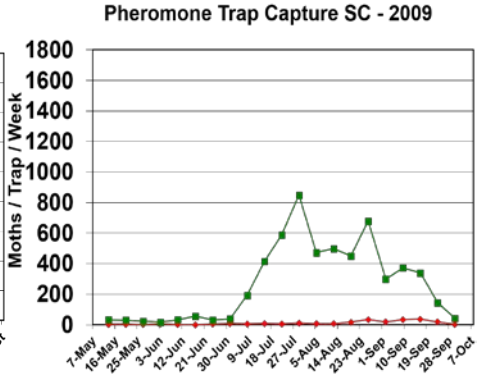




Trap data from 2007-2015 are shown below for reference to other years of trapping data from EREC:



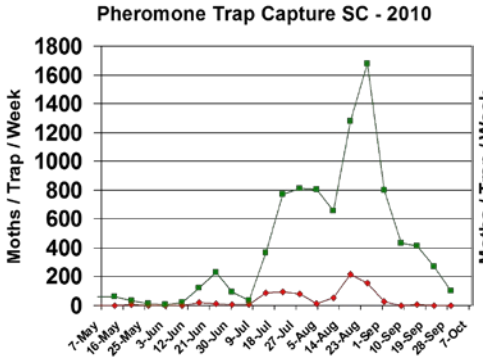


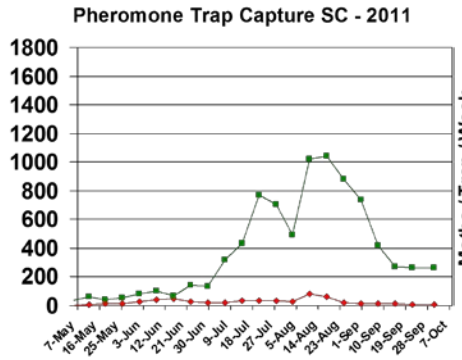


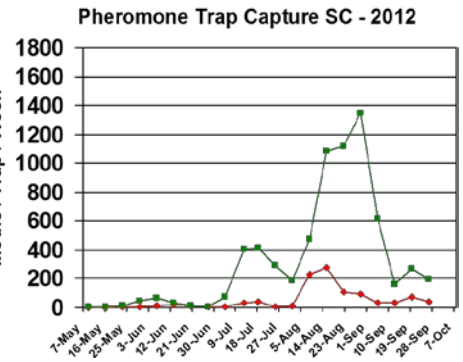
The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture, South Carolina Counties, Extension Service, Clemson, South Carolina.

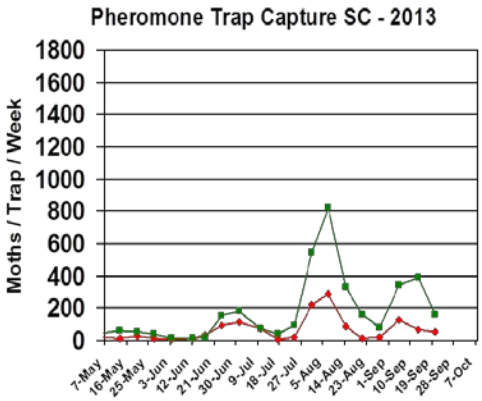
Public Service Activities

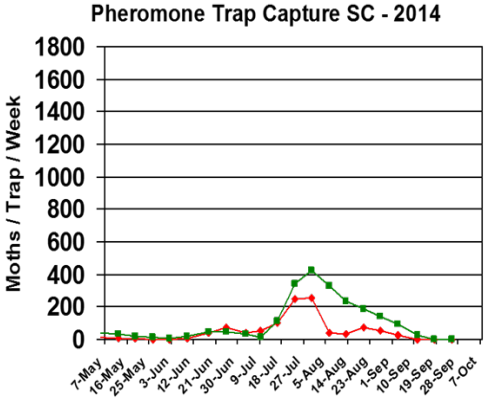
The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.

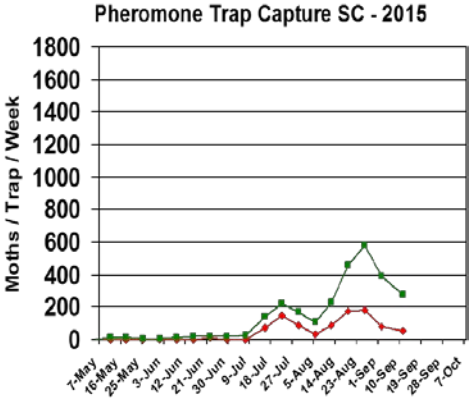












Pest Management Handbook – 2017

Insect control recommendations are available online in the 2017 South Carolina Pest Management Handbook at: http://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html

Free Mobile Apps: "Calibrate My Sprayer" and "Mix My Sprayer"

Download our free mobile apps called "Calibrate My Sprayer" and "Mix My Sprayer" that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats): http://www.clemson.edu/extension/mobile-apps/

Need More Information?

For more Clemson University Extension information: http://www.clemson.edu/extension/

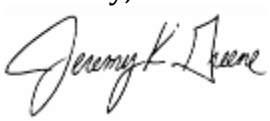
For historical cotton/soybean insect newsletters: http://www.clemson.edu//extension/agronomy/cotton1/newsletters.html

The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture, South Carolina Counties, Extension Service, Clemson, South Carolina.

Public Service Activities

The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.

Sincerely,



Jeremy K. Greene, Ph.D.
Professor of Entomology

Visit our website at:
http://www.clemson.edu

The Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer. Clemson University Cooperating with U.S. Department of Agriculture, South Carolina Counties, Extension Service, Clemson, South Carolina.

Public Service Activities

The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.